

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-12 (cancelled).

13. (Previously Presented) A power supply apparatus comprising:

- a charge pump DC/DC converter having a capacitor for charging and discharging; and

- a series regulator,

- wherein the charge pump DC/DC converter and the series regulator are operated depending on an operation command,

- wherein the series regulator comprises:

- an input terminal into which an input voltage is inputted;

- an output terminal from which an output voltage is outputted;

- a transistor connected between the input and output terminals;

- an error amplifier in which an output signal from the error amplifier is inputted to a gate of the transistor;

- a first resistor, a second resistor and a switching element connected in series between the output terminal and a predetermined potential terminal,

- wherein the error amplifier has input terminals to which a reference potential and a potential at a node between the first and second resistors are inputted, and

wherein the switching element is turned on or turned off based on the operation command.

14. (Previously Presented) A power supply apparatus comprising:

a DC/DC converter; and

a series regulator,

wherein the DC/DC converter and the series regulator are operated depending on an operation command, and

wherein the series regulator comprises:

an input terminal into which an input voltage is inputted;

an output terminal from which an output voltage is outputted;

a transistor connected between the input and output terminals;

an error amplifier in which an output signal from the error amplifier is inputted to a gate of the transistor;

a first resistor, a second resistor and a switching element connected in series between the output terminal and a predetermined potential terminal,

wherein the error amplifier has input terminals to which a reference potential and a potential at a node between the first and second resistors are inputted, and

wherein the switching element is turned on or turned off based on the operation command.

15. (Previously Presented) A power supply apparatus comprising:

- a switching regulator; and
- a series regulator,

wherein the switching regulator and the series regulator are operated depending on an operation command, and

wherein the series regulator comprises:

- an input terminal into which an input voltage is inputted;
- an output terminal from which an output voltage is outputted;
- a transistor connected between the input and output terminals;
- an error amplifier in which an output signal from the error amplifier is inputted to a gate of the transistor;
- a first resistor, a second resistor and a switching element connected in series between the output terminal and a predetermined potential terminal,

wherein the error amplifier has input terminals to which a reference potential and a potential at a node between the first and second resistors are inputted, and

wherein the switching element is turned on or turned off based on the operation command.